

comprising nickel, nitrogen, aluminum, rhodium, tantalum or other suitable element, as long as the seed layer saturation flux density ( $B_s$ ) value is no less than the about 1.9 to about 2.3 T (19 to 23 kG) value of electroplated layers 38 and 42. Seed layers 36 and 40 may be deposited by sputtering, ion beam deposition or vacuum deposition (evaporation). Head 20 is described in the formally commonly-assigned U.S. Patent Application No. 10/054,554 filed on even date herewith [(Assignee Docket No. SJ09-2000-0203)] entitled "A High-Saturation Thin-film Write Head for High-Coercivity Magnetic Data Storage Media," which is entirely incorporated herein by this reference. Upper and lower pole layers 22-24 can transmit magnetic flux levels of over 2 T (20 kG) at high frequencies without saturating because of the relatively low coercivity ( $H_c$ ). Thus, write head 20 is suitable for writing magnetic data onto high-coercivity magnetic storage media at high frequencies required to support the increased areal data storage densities demanded today.